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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,041	06/25/2003	Garry R. Lundstrom	10375US01	3692

7590 01/31/2006

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EXAMINER	
FIGUEROA, NATALIA	

ART UNIT	PAPER NUMBER
2651	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Supp.-1

Notice of Allowability

Application No.	Applicant(s)	
10/606,041	LUNDSTROM, GARRY R.	
Examiner	**Art Unit**	
Natalia Figueroa	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment (18 August 2005)*.

2. ☒ The allowed claim(s) is/are *1,3-7,16,19 and 20*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

REASONS FOR ALLOWANCE

Allowable Subject Matter

1. Claims 1, 3-7, 16, 19 and 20 are allowed.

2. The following is an examiner's statement of reasons for allowance:

RE claim 1, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a method comprising selectively applying magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium, wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, wherein the first and second sets of surface variation comprise first and second protrusions respectively, and selectively applying magnetic fields to the second set of surface variations comprises applying magnetic fields to the second protrusions and not applying magnetic fields to areas between the second protrusions.

RE claim 3, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a method comprising selectively applying magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium, wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, further comprising conditioning the magnetic medium prior to synchronizing the magnetic drive to magnetically expose the first and second sets of surface variations relative to areas between the surface variations in the first set and areas between surface variations in the second set.

RE claims 4 and 20the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a method and associated system applying magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium, wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, wherein the patterned magnetic medium exhibits perpendicular magnetic anisotropy, and at least some of the surface variations in the first and second sets define widths of less than approximately 5.0 microns.

RE claim 6, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a method comprising selectively applying magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium, wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, and magnetically detecting the set of first surface variations relative to areas between the surface variations in the first set.

RE claim 7, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest method comprising selectively applying magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium, wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, wherein synchronizing the magnetic drive includes identifying a variable frequency oscillator (VFO) signal in the set of first surface variations.

RE claim 16, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a system comprising a magnetic drive that synchronizes to the patterned magnetic medium based on detection of the set of first surface variations, and selectively applies magnetic fields to the second set of surface variations to encode data on the patterned magnetic medium; wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, wherein the magnetic drive includes a magnetic head positioned relative to the patterned magnetic recording medium and a controller to control application of magnetic fields by the magnetic head, and wherein the magnetic head defines a gap less than approximately 50% of a width associated with the surface variations in the second set.

RE claim 19, the prior art of record, and in particular King (USPN 5,121,280), fails to teach or suggest a system comprising a magnetic drive that synchronizes to the patterned magnetic medium based on detection of the set of first surface variations, and selectively applies magnetic fields to the second set of surface variations to encode data on the patterned magnetic medium; wherein a timing of the selective application of the magnetic fields is defined by the synchronization of the magnetic drive to the patterned magnetic medium, wherein the first and second sets of surface variations comprise first and second protrusions respectively, and the magnetic drive selectively applies magnetic fields to the second set of surface variations by applying magnetic fields to the second protrusions and not applying magnetic fields to areas between the second protrusions.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554. The examiner can normally be reached on Monday - Thursday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NFM

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600